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ART UNIT PAPER NUMBER

1771

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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/491,721	CREE ET AL.
	Examiner	Art Unit
	Jeremy R. Pierce	1771
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DOWN THE MAILING DOWN THE STATE OF THE MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tinuity will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	N. nely filed the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) Responsive to communication(s) filed on 22 Se	eptember 2005.	•
2a) This action is <b>FINAL</b> . 2b) ▼ This	action is non-final.	
3) Since this application is in condition for allowar	nce except for formal matters, pro	osecution as to the merits is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Disposition of Claims		
4)⊠ Claim(s) <u>1-17 and 25-30</u> is/are pending in the	application.	
4a) Of the above claim(s) is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-17 and 25-30</u> is/are rejected.		
7) Claim(s) is/are objected to.	•	
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9)☐ The specification is objected to by the Examine	r.	
10) The drawing(s) filed on is/are: a) acc		Examiner.
Applicant may not request that any objection to the		
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).
1. ☐ Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No.		
3. Copies of the certified copies of the priority documents have been received in this National Stage		
application from the International Bureau	•	Ç
* See the attached detailed Office action for a list	of the certified copies not receive	ed.
Attachment(s)	_	
Notice of References Cited (PTO-892)	4)  Interview Summary Paper No(s)/Mail D	
2) ☐ Notice of Draftsperson's Patent Drawing Review (P10-948) 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal F	Patent Application (PTO-152)
Paper No(s)/Mail Date	6) Other:	

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### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 22, 2005 has been entered.

### Response to Amendment

2. Applicant's amendment filed on September 22, 2005 has been entered. Claim 25 has been amended. Claims 31 and 32 have been cancelled. The amendment is sufficient to withdraw the 35 USC 112 1<sup>st</sup> and 2<sup>nd</sup> paragraph rejections set forth in sections 3 and 5 of the last Office Action because the objectionable portion of the claims has been eliminated.

## Claim Rejections - 35 USC § 102/103

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-6, 9-11, 13-17, and 25-30 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morman (U.S. Patent No. 5,336,545).

Morman teaches a composite elastic neck-bonded material comprising a necked fabric bonded to an elastic sheet (column 3, lines 19-24). The elastic sheet may be a film (column 3, lines 6-7) and can have two necked fabrics bonded on both sides of it (column 3, lines 31-35). Morman uses similar materials as the Applicant, such as polypropylene for the necked nonwoven fabric (column 25, lines 41-45) and block copolymers for the elastic sheet (column 6, lines 55-56). Although Morman does not explicitly teach the limitations ultimate force to break values of the nonwoven fabrics and the composite in grams per inch, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. polypropylene for the nonwoven and block copolymer films for the elastic sheet) and in the similar production steps (i.e. lateral consolidation of the web) used to produce the elastic composite material. The burden is upon the Applicant to prove otherwise. In re Fitzgerald, 205 USPQ 594. In the alternative, it would have been obvious to a person having ordinary skill in the art to provide the claimed ultimate force to break properties in order to provide a composite with an increased resistance to

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breaking, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

With regard to claim 25, the recitation that the nonwoven webs have been "set in a transversely consolidated state before being bonded to the elastic polymeric film" is a processing limitation in a product claim. "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." MPEP § 2113 [R-1]. In this case, while the nonwoven fabric may not be set in a transversely consolidated state before being bonded to the elastic polymeric film, the nonwoven fabric is still transversely consolidated through necking (column 5, lines 29-46). The nonwoven fabrics of Morman are set because it may be meltblown or spunbonded (column 5, lines 14-17), and such fabrics have fibers that are bonded sufficiently to form a fabric. Additionally, when the nonwoven fabrics of Morman are bonded to the film, heat is applied (column 8, line 56). The fibers would remain in a transversely consolidated state thereafter (i.e. the would be set). Thus, the final product would be substantially similar to the claimed product even though a different process makes it. With regard to claim 30, the final

product of Morman appears similar to that claimed by Applicant because similar production steps are used, albeit in a different order (i.e. the web would be set after being bonded to the film). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

With regard to claim 3, having between 2 and 50% of the thermoplastic fibers skewed in a direction greater than about 10 degrees from the machine direction is an inherent feature to the nonwoven web of Morman since the webs are meltblown, which involves random deposition of the fibers. With regard to claim 4, Morman teach the nonwoven web is made from microfibers with an average diameter of from about 4 to 40 microns (column 2, lines 32-37). It is known that 15-micron polypropylene is equal to 1.42-denier polypropylene; thus, Applicant's claimed range for fiber mass per unit area is clearly anticipated. With regard to claim 5, meltblown fibers are randomly deposited (column 2, lines 38-50). With regard to claim 6, Morman discloses the fabric can weigh between 0.2 and 10 ounces per square yard (column 6, lines 5-21). With regard to claim 10, Morman discloses the preferred use of low weight elastic sheets for economic reasons, but also discloses the use of sheets with a basis weight of up to 10 ounces per square yard (column 9, lines 1-7). With regard to claims 13 and 29, although Morman does not explicitly teach the limitation of Dart Impact value for the elastic sheet, it is reasonable to presume that said limitations are inherent to the invention. Support for

said presumption is found in the use of similar materials (i.e. block copolymer) and in the similar production steps (i.e. similar weights) used to produce the elastic sheet. The burden is upon the Applicant to prove otherwise. In the alternative, it would have been obvious to one having ordinary skill in the art to provide a polymeric film layer with a Dart Impact value of at least 400 grams in order to create a film that is puncture and resistant, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. With regard to claims 15-17, Morman discloses the nonwoven fabrics and elastic sheet can comprise multiple layers (column 3, lines 19-46).

## Claim Rejections - 35 USC § 103

6. Claims 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morman in view of Hassenboehler et al. (U.S. Patent No. Re 35,206).

Morman does not disclose the processing limitation of setting the fabric in a transversely consolidated state before bonding to the film. Hassenboehler et al. also teach transversely consolidating a nonwoven web (Abstract). Hassenboehler et al. teach that the nonwoven materials exhibit remarkable elasticity in the cross-direction (column 8, lines 30-34). It would have been obvious to a person having ordinary skill in the art at the time of the invention to transversely consolidate the web of Morman in order to increase the elasticity in the cross-direction, as taught by Hassenboehler et al.

7. Claims 7, 8, and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Morman in view of Haffner et al. (U.S. Patent No. 5,789,065).

Morman do not teach the elastic sheet to be made from metallocene-based low-density polyethylene film. Haffner et al. disclose block copolymers and metallocene-catalyzed ethylene films as suitable elastic film layers useful in the same art of personal care products. It would have been obvious to one having ordinary skill in the art to use a metallocene-catalyzed ethylene film in the composite of Morman, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. With regard to claim 12, Morman does not teach perforating the elastic sheet. However, Haffner et al. disclose providing perforations in the elastic film layer allow it to be breathable. It would have been obvious to one having ordinary skill in the art to provide perforations in the elastic sheet of Morman in order to provide breathability to the composite, as taught by Haffner et al.

#### Response to Arguments

- 8. Applicant's arguments filed November 16, 2005 have been fully considered but they are not persuasive.
- 9. Applicant argues that Morman's necking of its material has no set. Applicant argues that the necked or tensioned material of Morman is maintained as tensioned until laminated. However, these arguments are directed at the method of making the laminate material, rather than the final product itself. Morman provides a product that appears similar to the product found in the claimed invention. Even if the product of

Morman is made by a different process, the patentability of a product does not depend on its method of production.

- 10. Applicant argues that the Examiner cannot presume from Morman's heat bonding that a set will result because Morman makes no mention of that possibility. However, Morman does teach that the neckable material is set. The neckable material of Morman has a permanent set that is measured as a ratio of the increase in length of the sample after a cycle divided by the maximum stretch during cycling (column 14, lines 9-12). While Morman may not teach "setting" the web before lamination to the film layer, the nonwoven fabric in the final product would be set.
- 11. Applicant argues that the Examiner has ignored the differences between consolidation and necking. However, necking is a type of lateral consolidation. Even though the products may be made by different processes, they appear to be similar. The burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.
- 12. Applicant argues that Hassenboehler et al. cannot be combined with Morman because the two references disclose very different processes: consolidation and necking. However, necking is a type of consolidation. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*,

837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Hassenboehler et al. teach that consolidating the nonwoven material by heat setting creates a fabric with improved elasticity. Therefore, it would be obvious to a person of ordinary skill to consolidate the fabrics provided in Morman according to the process of Hassenboehler et al. in order to derive improved elasticity.

13. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

#### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (571) 272-1479. The examiner can normally be reached on normal business hours, but works flextime hours.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeremy R. Pierce November 16, 2005

ELIZABETH N. COLE

BRIMARY EXAMINER